

Title (en)  
Selfregulating heating element

Title (de)  
Selbstregelndes Heizelement

Title (fr)  
Élément de chauffage à autorégulation

Publication  
**EP 0793399 A2 19970903 (DE)**

Application  
**EP 97103147 A 19970226**

Priority  
DE 19607699 A 19960229

Abstract (en)  
The element combines a strip conductor (1), having little or no temperature coefficient of specific resistance, and a sleeved wire conductor (2) having a positive coefficient. The sleeve (13), e.g. of nickel-chrome alloy, is insulated from the wire (11) by a layer (12) e.g. of magnesia ceramic. The wire is connected in series with the strip and thermally coupled to it throughout its length. Both the strip and the wire may consist of parallel-connected portions. The sleeve also provides corrosion protection for the wire.

Abstract (de)  
Selbstregelndes Heizelement zum Erwärmen eines gasförmigen strömenden Mediums mit einem Bandleiter 1 und einem Regelleiter 2, die elektrisch in Reihe zueinander geschaltet und über ihre Länge in thermischem Kontakt miteinander, elektrisch jedoch gegeneinander isoliert angeordnet sind. Der Regelleiter 2 besteht insbesondere aus einem Mantelleiter, dessen metallischer Mantel mit dem Bandleiter 1 elektrisch verbunden ist. <IMAGE>

IPC 1-7  
**H05B 1/02**; **H05B 3/14**

IPC 8 full level  
**B60N 2/56** (2006.01); **H05B 1/02** (2006.01); **H05B 3/14** (2006.01)

CPC (source: EP KR)  
**B60N 2/5685** (2013.01 - EP KR); **H05B 1/0236** (2013.01 - EP KR); **H05B 3/141** (2013.01 - EP KR); **H05B 2203/014** (2013.01 - EP KR); **H05B 2203/02** (2013.01 - EP KR)

Cited by  
GB2320614A; EP2525072A1; US8707923B2; EP2525073A1; EP2525074A1; US9038608B2

Designated contracting state (EPC)  
AT DE ES FR GB IT SE

DOCDB simple family (publication)  
**EP 0793399 A2 19970903**; **EP 0793399 A3 19980429**; **EP 0793399 B1 20030528**; AT E241893 T1 20030615; DE 19707764 A1 19970904; DE 59710150 D1 20030703; ES 2194133 T3 20031116; KR 100499307 B1 20050930; KR 19980070139 A 19981026

DOCDB simple family (application)  
**EP 97103147 A 19970226**; AT 97103147 T 19970226; DE 19707764 A 19970226; DE 59710150 T 19970226; ES 97103147 T 19970226; KR 19970067066 A 19971209